

PROPOSAL FOR PERSONAL SERVICES CONTRACT

A PRELIMINARY STUDY OF SELECTION OF PERSONNEL

FOR FOREIGN LANGUAGE STUDY

██████████  
August 10, 1953

STATINTL

I. OBJECTIVES

The background for the proposed study is the fact that relatively large numbers of personnel in military and governmental agencies are currently being selected and sent for training in certain modern foreign languages of strategic importance. Experience with these programs has indicated that many otherwise promising trainees fail to learn a foreign language as well and as rapidly as is desirable. In view of the length and expense of the training programs, the consequent wastage of effort is of serious proportions.

One factor in the failure of many trainees in learning a foreign language is a lack of certain abilities and aptitudes for this kind of training. By seeking to measure these abilities and aptitudes, it is believed that it would be possible to develop procedures for selecting trainees which would markedly reduce the number of failures. This is the chief objective of the research proposed herein.

It might be thought that suitable procedures for selecting language trainees would depend chiefly upon tests of intelligence. Previous research with the foreign language aptitude problem, however, has indicated that this is not the case. To be sure, intelligence tests have proven their worth in predicting success in certain types of language courses, namely, those of the traditional sort which emphasize only the acquisition of a reading knowledge of a language. The types of skills emphasized in current government-sponsored language courses are, however, those having to do with the speaking and the understanding of the spoken language. The evidence points to the conclusion that intelligence tests of the usual variety fall short of desired standards of validity in predicting success with these aspects of language learning. It should also be remarked that trainees in governmental and military language courses are in general already highly selected with respect to intelligence.

In the last few years, research on various sorts of verbal and linguistic tests has revealed the existence of a number of traits of individual differences which are largely independent of general intelligence. These tests are regarded as promising prognosticators of foreign language learning success, particularly of success in oral-aural skills, but they have never been tried out in this connection. The focus of the present study will be to determine the validity of such tests in measuring foreign language aptitude. If some of these prove to be good predictors, they can provide the basis for an improved selection program.

## II. PROPOSED RESEARCH PROCEDURES

In accordance with the usual plan for validity studies, the following steps will be taken:

1. Assembly of a battery of promising foreign language aptitude tests, including certain already constructed tests as well as certain tests of novel design.
2. Administration of these tests to various groups of trainees in government-sponsored and/or university language courses, preferably at the start of training.
3. Collection of criterion data relating to the success of these trainees in learning various foreign language skills, including oral fluency and aural comprehension.
4. Statistical analysis of the relations between predictors and criterion measurements to determine predictive validity of the tests and to establish a suitable selection procedure.

The tests to be investigated fall into a number of classes:

1. Tests of known mental ability factors. It seems likely that tests of V (Verbal Knowledge of the Native Language), R (Reasoning), W (Word Fluency) in its various forms, and M (Rote Memory) will make at least some contribution to the prediction of success.
2. Perceptual tests. The ability to discriminate complex speech sounds and patterns thereof is regarded as of fundamental importance in learning to speak and understand a foreign language. Most of the tests in this classification will have to be constructed "from scratch," but it is believed that the preparation of such tests will be relatively easy if suitable electronic equipment is at hand.
3. Speech performance tests. The ability to imitate the sounds of a foreign language and to perform other tasks involved in speaking a foreign language is obviously important. As in the case of the perceptual tests, most of the tests in this classification will have to be developed from the ground up. Some tests of ability to speak the native language already exist and will be tried out, on the theory that native-language ability is predictive of foreign-language success.
4. Work-sample tests. Greatest promise resides in a group of tests which are essentially work-sample tests, that is, tests in which the subject learns a small sample of a foreign language (or an artificially constructed language). Several tests of this character are already available.

It was stated above that tests will preferably be administered to trainees before they begin training. This is because otherwise one has no evidence as to the extent to which training in foreign languages affects performance on the tests. However, this implied that a certain time must elapse between test administration and collection of criterion data. In view of the short period of the proposed contract and the difficulty of finding suitable groups of starting trainees, there will be a temptation to administer tests, in many cases, after the start of training. As far as possible this temptation will be resisted, since the evidence at hand indicates that performance in the first few weeks of foreign language programs is fairly predictive of success after a longer period. Therefore, the investigator would prefer to collect relatively short-term criteria after administering tests at the initiation of training than to use long-term criteria in conjunction with tests administered relatively late in training.

### III. OUTCOMES

The contractor will submit a final report on the investigation. In case the investigation is successful in disclosing useful predictors of foreign language learning ability, the final report will include details of the tests and procedures recommended for use in a selection program. If a need for further research is indicated by the results, the report will so state.

### IV. PROPOSED CONTRACT PERIOD AND COSTS.

The contract is proposed for a period of six months, to begin not earlier than 14 September, 1953.

The cost of the above research is estimated at \$7000.00. A detailed budget is presented on the next page.

Submitted by



STATINTL

BUDGET

Salaries (including, in each case, leave and Social Security)

Principal Investigator .....	\$1000.00	
Research Assistants and Field Representatives ....	1200.00	
Consultants .....	500.00	
Secretarial and Clerical Assistance .....	600.00	
	<u>\$3300.00</u>	\$3300.00

Equipment, supplies, and services

Stationery and related supplies .....	100.00	
Statistical analyses.....	1000.00	
Printing and reproduction .....	500.00	
Telephone, postage, and express .....	100.00	
Tape recording equipment and supplies .....	500.00	
	<u>\$2200.00</u>	\$2200.00

<u>Travel</u> .....		\$1000.00
---------------------	--	-----------

<u>Space</u> (rental and other overhead) .....		500.00
		<u>500.00</u>
		\$7000.00